

REMARKS

Reconsideration of the above-identified application, in view of the following remarks, is respectfully requested.

I. Abstract

The abstract of the instant application was objected to because the abstract was allegedly missing. In response, the specification has been amended to include the abstract that appeared in the originally submitted PCT application (WO 01/15737). Thus, the objection to the specification is believed to have been addressed and overcome.

II. Status Of The Claims

Claims 36-58, 61-75, 77, and 84-92 are pending in this application of which claims 36-58, 61, 64-75, and 77 have been withdrawn from consideration. Claims 44, 65, and 87 have been cancelled, without prejudice or disclaimer, by way of this amendment. Applicant respectfully submits that certain of the withdrawn process claims, claims 36, 64 and 66-72, which are drawn to methods of preparation of the compounds of the Formula VI, will be rejoined upon allowance of claim 62. MPEP 821.04. These process claims have been amended to include all the limitations of the product claim. Applicant reserves the right to file one or more divisional or continuation applications directed to any cancelled subject matter or any other subject matter disclosed in the application but not encompassed by the pending claims.

Claims 36, 43, 62, 73, and 77 have been amended to restrict the identity of M² to that comprising an oligonucleotide residue. These amendments originate from cancelled claims 44, 65, and 87. Support for these amendments is found throughout the specification, for example, on page 11, lines 5-9 and page 21, lines 12-13.

Claim 58 has been amended to correct the punctuation.

All amendments are supported by the application as filed. No new matter has been added.

III. Rejection Under 35 U.S.C. § 102

Claims 62, 63, and 84-92 have been rejected under 35 U.S.C. 102(b) as allegedly anticipated by Constancis et al. (US Patent No. 5,496,872, "Constancis"). The Examiner asserts that Constancis teaches all the required elements of the compounds of Formula VI, wherein, for example, M¹ is a peptide residue and M² is the residue of a molecule bearing a hydroxy group. For support of the Section 102 rejections, the Examiner cites certain exemplary compounds found in Examples 8-10 of Constancis and Constancis claim 1.¹

In response, Applicant has amended claim 62 to change the identity of M² from "the residue of a molecule bearing a hydroxy group" to "an oligonucleotide residue". (See page 11, lines 5-9 and page 21, lines 12-13). This amendment incorporates the language of claim 87, now cancelled, into the independent base claim from which it depends. It is respectfully submitted that the compounds in claim 1 and in Examples 8-10 of Constancis do not teach the compounds of Formula VI wherein M² comprises an oligonucleotide residue. The Constancis disclosure only provides for compounds wherein M² is the residue of 1) an aliphatic or aromatic alcohol, 2) a sulfur containing amino acid or derivative thereof, or 3) a sulfur containing amine (See col. 1, line 66 to col. 2, line 17). Thus, it is believed that, by entry of this amendment, the section 102 rejection as it applies to claim 62 has been addressed and overcome.

Respecting claims 63 and 84-92, the Examiner provides no additional argument other than to recite the compounds of Constancis Examples 8-10. Therefore, the section 102 rejection of claims 63 and 84-92 is respectfully traversed because these claims all depend, with the exception of cancelled claim 87, from currently amended claim 62.

¹ It is respectfully submitted that the formula represented by the Examiner on Office Action page 3 is not a compound taught in claim 1 of Constancis. Instead, the formula represented in Constancis claim 1 must have a carbonyl group bonded directly to the carbon β to the thiol group.

IV. Rejection Under 35 U.S.C. § 103

Claims 62, 63, and 84-92 have been further rejected under 35 U.S.C. 103 as allegedly obvious over Constancis. The Examiner asserts that, although Constancis does not teach, *inter alia*, compounds wherein M1 is the residue of a molecule bearing an amino group or compounds wherein M2 is the residue of a molecule bearing a hydroxyl group, the substitution of different chemical moieties at M1 and M2 would have been obvious in view of Constancis. Specifically, the Examiner asserts that choice of the appropriate chemical moiety at group M1 and/or M2 is merely a matter of judicious selection by one skilled in the art.

In addition to the amendments and arguments pertaining to the Section 102 rejection, applicant further submits that the teachings of Constancis appear to be non-analogous art. Whereas the instant compounds are contemplated for use as in biotechnology as conjugates (*See* page 1, lines 6-9 and page 4, lines 4-11), the Constancis compounds lie in the field of adhesive compositions for surgical use (*See* e.g., col. 1, lines 4-7, col. 1, lines 49-52, and col. 11, lines 24-27) and are not “reasonably pertinent to the particular problem with which the inventor was concerned” (*In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992)). Constancis would logically not “have commended [itself] to the inventor’s attention in considering his problem” (*In re Clay*, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992)). Specifically, the judicious selection of appropriate chemical moieties of particular relevance to adhesive compositions would not translate into the judicious selection of an oligonucleotide for group M² for use in biotechnology conjugate applications. Constancis is in a completely different technical field from the invention, relating to surgical adhesives rather than methods for linking peptides (and other compounds comprising amino groups) to oligonucleotides. In light of this difference, Constancis would not prompt the skilled person to attempt the present invention.

In view of the above amendments and arguments, the applicant respectfully submits that the section 103 rejection to claims 62, 63, and 84-92 has been addressed and overcome.

